

Advancing Science Through Critical Discussion

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Recent initiatives in psychological science — such as facilitating replication and ensuring sound methodologies — have sparked a lively dialogue among researchers, publishers, and the general public.

The July 2013 issue of [*Perspectives on Psychological Science*](#) builds upon these recent discussions, featuring a special section devoted exclusively to the advancement of psychological science.

Perspectives Editor [Barbara A. Spellman introduces](#) this section and outlines the articles, all of which are available free to the public.

Touching on a range of topics, this collection provides an historical perspective while also prompting researchers to disambiguate and improve methodologies, effectively share data and practices, and realize the importance of critical discussion within the field.

The first article, originally written by [Bill McGuire](#) over 35 years ago, is still timely today. It presents the argument that psychology researchers should use experiments to outline and limit theories — not to prove or disprove them. McGuire suggests that all validated, empirical findings — whether significant or not — are critical to understanding psychology as a whole, and the dissemination of this work is key to advancing the field.

The next several articles address methodological soundness, transparency, and collaborative data sharing. [LeBel and colleagues](#) urge researchers to elucidate their methods beyond what is written in published papers, and have created a website where authors can do so. [Perrino and her team](#) provide a compelling example from the National Institute of Mental Health in which data sharing and collaboration between researchers fosters scientific excellence. Finally, [Boot, Simons, Stothart, and Stutts](#) explain how the placebo effect still afflicts psychological research, and provide novel insights toward addressing this confound.

The last two articles exemplify the kind of critical discussion that is necessary to advance psychological science. [Firestone](#) proffers a criticism of embodied cognition, and [Proffitt](#) responds to these concerns with clarifying arguments. This productive approach — contention over theory and methodology, but not facts — is vital to defining and shaping the field of psychology.